

REMARKS/ARGUMENTS

Applicants have carefully reviewed the Office Action of April 19, 2006. Reconsideration of the Examiner's rejection of the claims is respectfully requested.

A total of 8 claims remain in the case, i.e. claims 1, 2, 18, 20, 21, 25, 26, and 29. Independent claim 1 is currently amended to recite patentable distinctions not found in the single cited reference.

Claims 7, 19, 22, 23, 24, 27 and 28, and 48 are canceled without prejudice. Dependent claims 2, 18, 20, 21, 25, 26, and 29 are currently amended to recite that the particles are expandable polystyrene particles. The withdrawn claims are 3-6, 8-17, and 30-47.

Election/Restriction

Applicants note that claims 3-6, 8-17 and 30-47 remain withdrawn from further consideration by the examiner, 37 CFR 1.1452 (b), as being drawn to non-elected inventions.

Claim Rejection under 35 U.S.C. 102 (b)

Claims 1, 2, 18, 20-23, 25, 26, 29 and 48 are rejected as being anticipated by Brenner et al. (WO 00/50511) for the reasons cited in the previous action. Applicants' arguments filed April 3, 2006 were not considered to be persuasive. This response was centered on the Applicants' arguments that the prior art additive composition is not on the surface of any particles and that the composition of this reference is not formed into particles at the time the additives are added to the composition. The Examiner rebuts this position by referring the Applicant to column 12, lines 42-44 of the English language version of the reference which teaches that the "additives are incorporated...by mixing polymer

granules (resin particles) with the additives...or by mixing the solutions of the polymer with solutions of the additives, followed by evaporation of the solvents in a known manner". The Examiner states that both of these coating methods would result in the resin granules being coated with the additives, prior to any further processing to form a final product, such as by extrusion. Therefore the coated resin particles are taught by the prior art.

The Invention

The invention, as now recited in the amended claims, particularly amended claim 1, relates to expandable polystyrene particles that are impregnated with a blowing agent for forming a foam container in a molding process. These expandable polystyrene particles are coated with a coating composition comprised of a liquid part and a solid part where the liquid part comprises a) polyethylene glycol having an average molecular weight from 200 to 800; and the solid part comprises b) a polyolefin wax, and c) a metal salt of higher fatty acids selected from the group consisting of zinc, magnesium, calcium, and aluminum salts of stearic, lauric and myristic acid. The polyolefin wax of component b) is polyethylene wax with a particle size of about 6 microns to about 60 microns and an average molecular weight of about 650 to about 1000. Amended claim 1 further recites that the foam container is constructed to hold foods and liquids and that the coating composition improves at least the leakage resistance of the foam container relative to the foods and liquids.

In Applicants' previous response, Applicants stated that the type of polyethylene wax was an important feature of the coating composition. The particle size and the average molecular weight of the polyethylene wax seem to work in conjunction with components a) and c) of the

coating composition to bring about the desired effects for the foam container made of the expandable polystyrene particles of the claimed invention.

The Cited Reference

Brenner et al. (WO 00/50511 equivalent to U.S. Patent No. 6,740,697) teaches a flame retardant thermoplastic molding composition containing an amorphous thermoplastic polymer, at least one flame retardant in the form of a fully or partially halogenated sulfonic acid salt and at least one alkaline earth metal sulfate and/or one oxide having an average particle size of up to 400nm. The amorphous thermoplastic molding compositions preferably are polycarbonates, but can include polyesters or polyolefins, which include polypropylene and amorphous polystyrenes (Column 9, lines 45-55 of '697 patent).

Column 12, lines 37 to column 13, line 22 of the '697 patent state that the molding compositions may further comprise suitable additives such as a mold release agent such as zinc stearate, a lubricant such as polyolefin wax, and an antistatic agent such as polyethylene glycol, and that the total additive content of the molding composition is preferably from 0 to 20 wt.%, still more preferably 0 to 5 wt% based on the weight of the molding composition.

The object of the invention of this reference is to provide amorphous thermoplastic molding compositions, in particular polycarbonates, having improved flame behavior (Column 2, lines 18 -21 of the '697 patent). This object is achieved by providing the thermoplastic molding composition comprising an amorphous thermoplastic polymer and a flame retardant in combination with an alkaline earth metal sulfate and/or an oxide having in each case an average particle size of up to 400 nanometers (about 0.4 microns) (Column 2, lines 33 -38 of the '697 patent). These molding compositions are used to manufacture flame

retardant/flame resistant articles, such as housings and covering plates for electrical equipment, and have a role in the construction sector for sheets, windows and claddings of widely varying types (Column 1, lines 43-45 of the '697 patent). Column 13, lines 35-40 of the '697 patent teaches that the flame retardant/flame resistant polycarbonate compositions may be used to manufacture solid plastic sheets or cellular sheets or multi-wall sheets, which are produced by extrusion or co-extrusion.

In view of the patentable distinctions now appearing in the claims, Applicants respectfully request that the rejection of the claims under 35 U.S.C. 102 (b) be withdrawn. Additionally, Applicants submit that one skilled in the art for providing expandable polystyrene particles impregnated with a blowing agent and containing a coating composition for making a foamed container would not look to the teachings of the '697 patent which discloses flame retardant/flame resistant polycarbonate molding compositions. Therefore, the claimed invention of claims 1, 2, 18, 20, 21, 25, 27, and 29 in their amended form is not obvious in view of the '697 patent.

Summary and Conclusion

The claimed invention, particularly that of amended, independent claim 1, is not taught, disclosed, or even suggested in the '697 reference. The dependent claims are patentable on their own merits in addition to being directly or indirectly dependent on a patentable claim 1.

Applicants, for the first time, have found that expandable polystyrene particles used in forming a foam container in a molding process and coated with the claimed coating composition of claim 1 including the particle size and molecular weight of the polyethylene wax are important features for the desired end result of improving at least

the leakage resistance of foods and liquids in foam containers which are made of these expandable polystyrene particles in a molding process.

This is a non-fee amendment. If a fee is due, Applicants approve the debiting of Applicants' Account No. 501679 for this fee.

The inventorship remains as originally indicated.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

A handwritten signature in cursive script, reading "Suzanne Kikel", is written over a horizontal line.

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